

IN THE CLAIMS:

Please cancel Claims 2, 3, and 19 - 32 without prejudice or disclaimer of the subject matter recited therein.

Please amend Claims 1, 4-9, 11, 12, 14-16, and 18 and add new Claim 33 as follows.

1. (Currently Amended) An image forming apparatus operable in having a first image formation mode for forming an image on an image bearing member by using developer under a first predetermined image forming condition and a second image formation mode for forming an image on an image bearing member by using developer under a second image forming condition which is different from the first predetermined image forming condition, wherein said apparatus and is set so that an the amount of consumption of developer with respect to an identical image for forming an image in the second image formation mode is smaller than the amount of developer used for forming an identical image that in the first image formation mode, said apparatus comprising:

a storing device that stores setting ~~means for storing~~ information for setting the second image forming condition corresponding to a plurality of levels of an amount of usage of the image bearing ~~member;~~ member; and

a controller configured to set said image forming apparatus in the first image formation mode or control means for changing the second image forming condition in the second image formation mode; and depending on an the amount of usage of the image bearing member and information stored in said storing means

an image processing controller configured to discriminate the size of a concentrated pixel area in image information when the second image formation mode is set and to perform first and second image density lowering processes on image information presenting pixel areas of different sizes, depending on the discriminated size of the pixel area,

wherein in a state in which said controller is configured to set said image forming apparatus in the second image formation mode, an image density lowering process performed on the image information by said image processing controller is changed depending on the discrimination result of said image processing controller in such a manner that the first image density lowering process is performed so that image information representing pixels in pixel areas of a first size of the image to be formed has a first image density, and the second image density lowering process is performed so that image information representing pixels in pixel areas of a second size of the image to be formed has a second image density lower than the first image density, and

wherein said controller sets an image forming condition for a first size of the image and a second size of the image as the second image forming condition by using the setting information, stored in said storing device, corresponding to the amount of usage of the image bearing member.

2. (Canceled)

3. (Canceled)

4. (Currently Amended) An apparatus according to Claim 1, wherein said storing device means further has a second storing area for storing a plurality of levels of threshold information, and said control means changes the second image forming condition depending on information for setting the second image forming condition corresponding to a plurality of levels of an amount of usage of the image bearing member when an amount of usage of the image bearing member reaches a predetermined threshold information

wherein the threshold information and the setting information are stored corresponding to each other, and

wherein when the amount of usage of the image bearing member reaches an amount of usage represented by the threshold information, said controller sets an image forming condition for the first size of the image and the second size of the image as the second image forming condition on the basis of the setting information stored corresponding to the threshold information.

5. (Currently Amended) An apparatus according to Claim 1, wherein said image forming apparatus further comprises an exposure device that exposes means for exposing the image bearing member under an exposure operation condition on the basis of image information, and  
wherein the second image forming condition includes the exposure operation condition.

6. (Currently Amended) An apparatus according to Claim 5, wherein the exposure operation condition is an exposure time of said exposure device means.

7. (Currently Amended) An apparatus according to Claim 5 , wherein the exposure operation condition is an exposure time of said exposure device means on the basis of a sensitivity characteristic of the image bearing member.

8. (Currently Amended) An apparatus according to Claim 8, wherein the setting information for setting the second image forming condition corresponding to a plurality of levels of ~~an~~ the amount of usage of the image bearing member is designation information for ~~determinating~~ determining the second image forming condition.

9. (Currently Amended) An apparatus according to Claim 4, wherein the apparatus further ~~comprises an~~ comprising exposure ~~device that exposes~~ means for exposing the image bearing member under an exposure operation condition on the basis of image information, and the information for setting the second image forming condition corresponding to the plurality of levels of ~~an~~ the amount of usage of the image bearing member is the exposure operation condition of the exposure device means.

10. (Withdrawn). An apparatus according to Claim 3, wherein said control means selects the concentrated pixel pattern having a predetermined size on the basis of the information for setting the second image forming condition corresponding to the plurality of levels of an amount of usage of the image bearing member.

11. (Currently Amended) An apparatus according to Claim 1, wherein the image bearing member and said storing device means are integrally supported to form a cartridge which is detachably mountable to the image forming apparatus.

12. (Currently Amended) A cartridge ~~for being~~ detachably mountable to an image forming apparatus operating in having a first image formation mode for forming an image on an image bearing member by using developer under a first predetermined image forming condition and a second image formation mode for forming an image on an image bearing member by using developer under a second image forming condition which is different from the first predetermined image forming condition, the apparatus being and is set so that ~~an~~ the amount of consumption of developer for forming an image with respect to an identical image in the second image formation mode is smaller than the amount of developer used for forming an identical image that in the first image formation mode, the image forming apparatus including a controller configured to set the image forming apparatus in the first image formation mode or the second image formation mode and an image processing controller configured to discriminate the size of a concentrated pixel area in image information when the second image formation mode is set and to perform first and second image density lowering processes on image information presenting pixel areas of different sizes, depending on the discriminated size of the pixel area, said cartridge comprising:

the image bearing member, and

a storing means device that stores ~~for storing~~ information on the cartridge, said storing means device having:

a first storing area for storing setting information for setting the second image forming condition corresponding to a plurality of levels of ~~an~~ the amount of usage of the image bearing member in the second image formation mode; and

a second storing area for storing discriminating information for discriminating the size of the concentrated pixel area in the image information.

wherein the setting information and the discriminating information are stored correspondingly to each other.

13. (Withdrawn) A cartridge according to Claim 12, wherein said storing means further has a second storing area for storing a plurality of level of threshold information with respect to an amount of usage of the image bearing member.

14. (Currently Amended) A cartridge according to Claim 12, wherein ~~said the~~ image forming apparatus further comprises an exposure means device that exposes ~~for exposing the~~ said image bearing member and the second image forming condition is an exposure operation condition of ~~said the~~ exposure means device.

15. (Currently Amended) A cartridge according to Claim 14, wherein the exposure operation condition is an exposure time of ~~said the~~ exposure means device.

16. (Currently Amended) A cartridge according to Claim 14, wherein the exposure operation condition is an exposure time of ~~said the~~ exposure ~~means~~ device on the basis of a sensitivity characteristic ~~the of said~~ image bearing member.

17. (Withdrawn) A cartridge according to Claim 12, wherein the information for setting the second image forming condition corresponding to a plurality of levels of an amount of the image bearing member is designation information for determinating the second image forming condition.

18. (Currently Amended) A cartridge according to Claim 12, wherein the image forming apparatus further comprises ~~comprising an~~ exposure device that exposes ~~means for exposing~~ the image bearing member under an exposure operation condition on the basis of the image information, and the information for setting the second image forming condition corresponding to the plurality of levels of ~~an the~~ amount of usage of ~~the~~ said image bearing member is the exposure operation condition of the exposure device ~~means~~.

19. - 32 (Canceled)

33. (New) A cartridge according to Claim 12, wherein said storing device has a third storing area for storing threshold information on an amount of usage of the image bearing member; and

wherein the setting information and the threshold information are stored correspondingly to each other.